

ABSTRACT

5 The invention concerns a semiconductor device comprising in the channel region (6) first voids (7,8) adjacent to the junctions (4, 5) which have a predetermined length L_p and a dopant concentration N_p of a first conductivity type of the substrate (1) dopant locally increasing the net substrate concentration and second voids (9, 10) superposed on the first voids having a length L_n and a dopant concentration N_n of a second conductivity type
10 opposed to the first conductivity type satisfying the relationships $L_n > L_p$ and $N_n < N_p$ and locally decreasing the net substrate concentration but without modifying the type of conductivity. The invention is applicable to a MOS transistor.